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## **6.10 SOCIOECONOMICS**

This section describes the socioeconomic aspects of the vicinity and region potentially affected by the Project and potential impacts associated with construction and operation of the Project.

The Project will require a construction work force for this phase of the Project and an operations work force for the life of the Project. Duke Avenal is committed to hiring from the local labor pool to the extent possible for construction and operation of the Project. Because requirements for construction workers can be met for the most part by the existing regional work force driving a reasonable distance, and because the operations work force will not be large, significant adverse socioeconomic impacts will not occur. The Project will result in direct and indirect beneficial socioeconomic effects. The Project will result in an infusion of dollars from outside the local area in the form of monies spent for materials, equipment, wages and salaries. As a result, the Project will have a beneficial impact on the local economy. The City of Avenal supports development of the Project and has determined the Project is consistent with local land use plans.

Beneficial aspects of the Project related to socioeconomics are:

- Increased revenue to local vendors and suppliers from the \$325-million Project.
- Reduced electricity prices and improved electrical power reliability for California businesses, residents and services.
- Maximum use of locally available skilled craft labor.
- Reduction of the area unemployment rate by Project construction employment opportunities.
- Increase in County property tax revenue with new operating assets.
- Increase in state and city sales tax revenues from purchase of equipment and supplies.
- Natural gas transportation franchise fees for the City of Avenal.
- Promotion of indirect and induced employment in the local area.

The expected allocation of property taxes, sales taxes and franchise fees, and other benefits, are described in Section 6.10.2.

### 6.10.1 EXISTING CONDITIONS

Socioeconomic issues relevant to the existing environment include population, employment, economic base and fiscal resources, housing, schools, and public services and utilities.

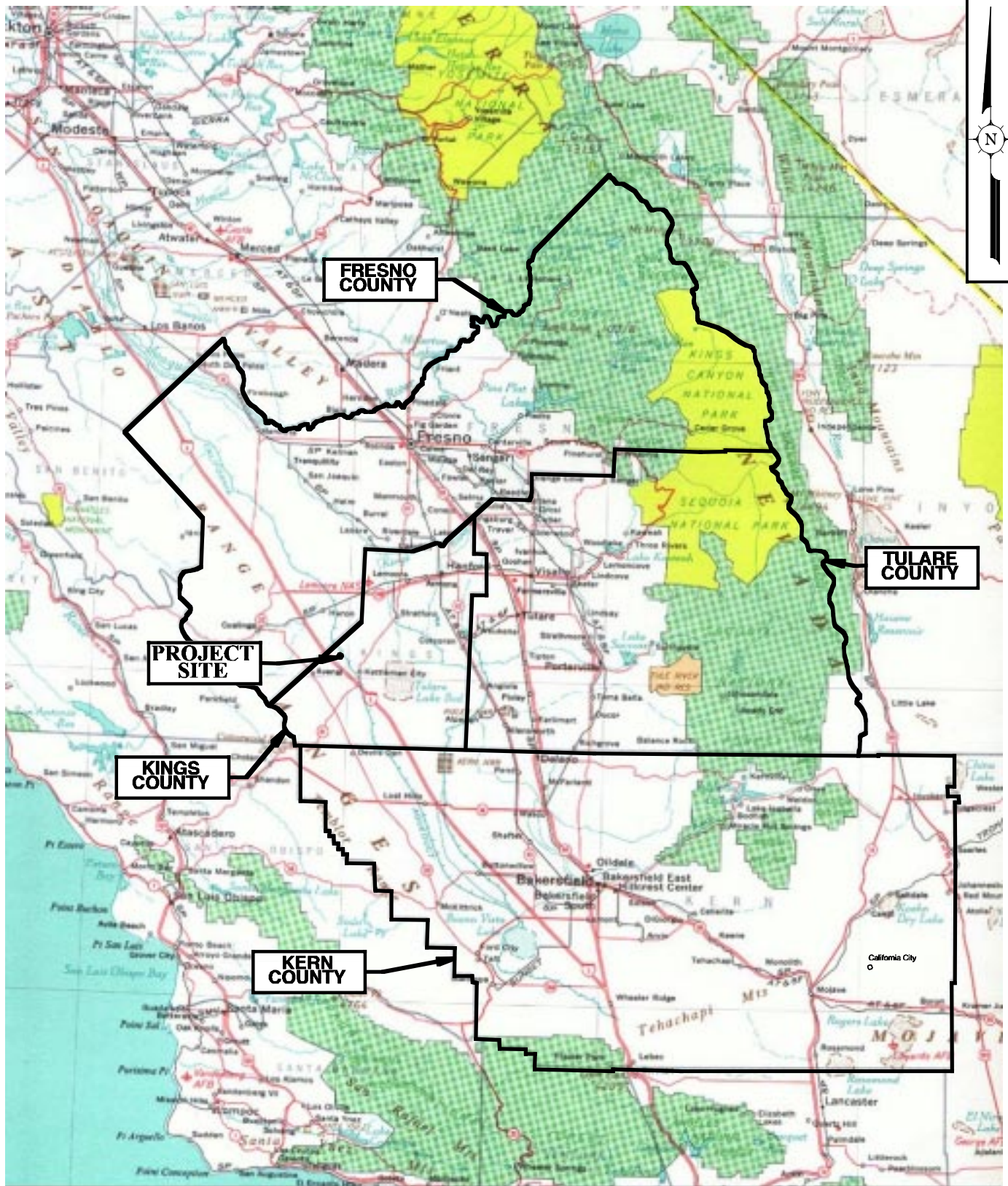
The Project site, natural gas interconnection and electric transmission line interconnection are located in Kings County. Agriculture is the primary land use in the Site area. The residential and business districts of Avenal are located approximately 6 miles southwest of the Site, and the City of Avenal water treatment plant is located on the northeast edge of the Site. The City of Coalinga is located approximately 16 miles west of the Site, and Interstate 5 is located approximately 2 miles to the southwest. The area is rural, and the nearest residences are located more than 1 mile from the Site. A large natural gas compressor station is located approximately 2 miles southwest of the Site.

#### 6.10.1.1 Population

The majority of the construction and operations personnel needed for the Project are readily available from existing populations in Kings County and adjacent Fresno, Tulare and Kern counties (Figure 6.10-1). Fresno, Tulare and Kern counties include some of the larger population centers in the region that are within a reasonable commuting distance (e.g., Fresno, Visalia, Bakersfield) and are capable of providing most personnel needs that are not available in Kings County.

Kings County includes the incorporated cities of Avenal, Corcoran, Hanford and Lemoore, most of Lemoore Naval Air Station and a number of unincorporated communities. Fresno County includes the incorporated cities of Clovis, Coalinga, Firebaugh, Fowler, Fresno, Huron, Kerman, Kingsburg, Mendota, Orange Cove, Parlier, Reedley, Sanger, San Joaquin, a part of Lemoore Naval Air Station and a number of unincorporated communities. Tulare County includes the incorporated cities of Dinuba, Exeter, Farmersville, Lindsay, Porterville, Tulare, Visalia, Woodlake and a number of unincorporated communities. Kern County includes the incorporated cities of Arvin, Bakersfield, California City, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, Wasco and a number of unincorporated communities.

Historical and projected population data for Kings, Fresno, Tulare and Kern counties, the City of Avenal and the state of California are summarized in Table 6.10-1. Annual average compounded population growth rates are summarized in Table 6.10-2. Over the past 20 years, the City of



## REGIONAL COUNTIES AND CITIES

DUKE ENERGY AVENAL, LLC

AVENAL ENERGY

FIGURE 6.10-1

Avenal and Kings County have experienced increases in population growth above the average growth for the state of California. Based on demographic information from the California Department of Finance, in 1980 the City of Avenal had a population of approximately 4,100; by 1990 the population had increased to approximately 9,800. This represents an average annual population growth rate of 8.97 percent from 1980 to 1990, above the average for the state of California. The Avenal State Prison was completed in 1987 and added to the increase in population from 1980 to 1990. The average annual growth rates from 1990 to 1995 and 1995 to 2000 for the City of Avenal also were above the average for the state of California, resulting in a City population of approximately 14,674 in the year 2000. As of January 1, 2001, the estimated population of the City of Avenal was approximately 15,700. Of this number, approximately 6,900 are housed in the Avenal State Prison. The remaining 8,800 are residents of the City of Avenal (Whitten, 2001).

Kings County also grew at average annual rates well above the average for the state of California for the periods 1980 to 1990, 1990 to 1995, and 1995 to 2000, resulting in an estimated County population of approximately 129,461 in the year 2000. Fresno, Kern and Tulare counties experienced above-average growth from 1980 to 1995, then the growth rates decreased to approximately average for the period from 1995 to 2000. Population information for the four counties is shown in Table 6.10-1, with annual population growth rates shown in Table 6.10-2.

Age distributions for the populations of the four counties are shown in Table 6.10-3. Ethnic composition is shown in Table 6.10-4.

**TABLE 6.10-1**  
**HISTORICAL AND PROJECTED POPULATION**

AREA	1980 <sup>(1)</sup>	1990 <sup>(1)</sup>	1995 <sup>(2)</sup>	2000 <sup>(3)</sup>	2010 <sup>(4)</sup>	2020 <sup>(4)</sup>
City of Avenal	4,136	9,770	11,941	14,674	NA	NA
Kings County	73,738	101,469	113,781	129,461	154,617	186,611
Fresno County	514,621	667,490	746,522	799,407	953,457	1,114,403
Kern County	403,089	543,477	612,823	661,645	859,818	1,073,748
Tulare County	245,738	311,921	346,400	368,021	469,509	569,896
California	23,782,000	29,758,213	31,910,061	33,900,000	39,957,616	45,448,627

(1) U.S. Census data

(2) Estimated

(3) 2000 U.S. Census data

(4) Projected

NA = Not Available

Source: California Department of Finance, 2001; The Sacramento Bee, 2001.



**TABLE 6.10-2**

**ANNUAL POPULATION COMPOUNDED GROWTH RATES**  
(percent)

AREA	1980-1990	1990-1995	1995-2000 <sup>(1)</sup>	2000-2010 <sup>(2)</sup>	2010-2020 <sup>(2)</sup>
City of Avenal	8.97	4.09	4.21	NA	NA
Kings County	3.24	2.32	2.62	1.65	1.90
Fresno County	2.64	2.26	1.38	1.71	1.57
Kern County	3.06	2.37	1.54	2.70	2.24
Tulare County	2.41	2.12	1.22	2.5	1.96
California	2.27	1.41	1.22	1.53	1.30

(1) Estimated

(2) Projected

NA = Not Available

Source: Calculated from data shown in Table 6.10-1.

**TABLE 6.10-3**

**POPULATION AGE DISTRIBUTION**

DEMOGRAPHIC ITEM	KINGS COUNTY	FRESNO COUNTY	TULARE COUNTY	KERN COUNTY
<b>POPULATION</b>				
1990	101,469	667,490	311,921	543,477
2000	129,461	799,407	368,021	661,645
<b>AGE DISTRIBUTION (for Year 2000)</b>				
0-18	29.0%	32.1%	33.8%	31.9%
18-24	11.8%	11.1%	10.6%	10.2%
25-44	35.0%	28.5%	27.6%	29.8%
45-64	16.8%	18.5%	18.2%	18.7%
65+	7.4%	9.9%	9.8%	9.4%

Source: U.S. Census Bureau, 2001a.

**TABLE 6.10-4****POPULATION, RACE/ETHNICITY AND POVERTY LEVEL - YEAR 2000**

SUBJECT	KINGS COUNTY		FRESNO COUNTY		TULARE COUNTY		KERN COUNTY	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>RACE/ETHNICITY</b>								
Total Population	129,461	100.0	799,407	100.0	368,021	100.0	661,645	100.1
White	69,492	53.7	434,095	54.3	213,751	58.1	407,581	61.6
Hispanic <sup>(1)</sup>	56,461	43.6	351,636	43.9	186,846	50.8	254,036	38.4
Asian	3,980	3.1	64,362	8.1	12,018	3.3	22,268	3.4
Black	10,747	8.3	42,337	5.3	5,852	1.6	39,798	6.0
Native American	2,178	1.7	12,790	1.6	5,737	1.6	9,999	1.5
Hawaiian	250	<1	1,000	<1				
Other	36,611	28.3	207,061	25.9	113,317	30.8	153,610	23.2
<b>POVERTY LEVEL<sup>(2)</sup></b>								
Persons Below Poverty Level	30,552	23.6	204,648	25.6	102,677	27.9%	138,945	21.0

(1) Hispanics may be of any race, so also are included in applicable race categories.

(2) 1997 model-based estimate.

Source: U.S. Census Bureau, 2001a.

### 6.10.1.2 Economy

Table 6.10-5 shows employment by industry for 1997 and projected to 2004 for Kings and Fresno, Kern and Tulare Counties. While farming and government are the two largest employers in Kings County, services, manufacturing and transportation/public utilities are the fastest growing, with average annual growth rates of 4.7 percent, 3.2 percent and 3.2 percent, respectively. In Tulare County, farming and government also are the two largest employers, while the fastest growing sectors are services and transportation/public utilities, both by 2.3 percent annually. In Fresno County, the services and government are the two largest employers, while manufacturing and transportation/public utilities are the fastest growing, with an annual growth rate of 2.8 percent, followed by services and government. In Kern County, the two largest employers are services and government, followed by farming. Services is the most rapidly growing employment sector, at an average annual rate of 4.5 percent, followed by government, manufacturing and transportation/public utilities, at 2.0 percent each.

**TABLE 6.10-5**  
**EMPLOYMENT DISTRIBUTION BY INDUSTRY**  
**IN KINGS AND ADJACENT COUNTIES**

**KINGS COUNTY**

INDUSTRY	1997		2004		Percent Change	Percent Growth Rate <sup>(1)</sup>
	No. Emp.	Percent	No. Emp.	Percent		
Farming	9,510	26.2	7,710 <sup>(1)</sup>	19.2	-23.3	-3.0
Mining & Construction	900	2.5	1,060	2.6	15.1	2.4
Manufacturing	3,570	9.8	4,440	11.0	19.6	3.2
Transportation, Public Utilities	770	2.1	960	2.4	19.8	3.2
Wholesale Trade	950	2.6	1,050	2.6	9.5	1.4
Retail Trade	5,540	15.3	6,340	15.8	12.6	1.9
Finance, Insurance, Real Estate	640	1.8	750	1.9	14.7	2.3
Services	4,800	13.2	6,610	16.4	27.4	4.7
Government	9,600	26.5	11,320	28.1	15.2	2.4
<b>Total</b>	36,280	100.0%	40,240	100.0%	9.8%	1.5%

**FRESNO COUNTY**

INDUSTRY	1997		2004		Percent Change	Percent Growth Rate <sup>(1)</sup>
	No. Emp.	Percent	No. Emp.	Percent		
Farming	60,300	19.5	57,100 <sup>(1)</sup>	16.4	-5.6	-0.8
Mining & Construction	12,700	4.1	13,200	3.8	3.8	0.6
Manufacturing	26,600	8.6	32,200	9.3	17.4	2.8
Transportation, Public Utilities	12,900	4.2	15,600	4.5	17.3	2.8
Wholesale Trade	14,000	4.5	15,100	4.3	7.3	1.1
Retail Trade	47,600	15.4	53,800	15.5	11.5	1.8
Finance, Insurance, Real Estate	13,200	4.3	14,800	4.3	10.8	1.6
Services	64,600	20.9	78,000	22.4	17.2	2.7
Government	57,900	18.7	68,300	19.6	15.2	2.4
<b>Total</b>	309,800	100.0%	348,100	100.0%	11.0%	1.7%

**TULARE COUNTY**

INDUSTRY	1997		2004		Percent Change	Percent Growth Rate <sup>(1)</sup>
	No. Emp.	Percent	No. Emp.	Percent		
Farming <sup>(2)</sup>	34,500	27.7	35,500	26.5	2.8	0.4
Mining & Construction	3,900	3.1	4,200	3.1	7.1	1.1
Manufacturing	12,000	9.6	13,000	9.7	7.7	1.2
Transportation, Public Utilities	4,100	3.3	4,800	3.6	14.6	2.3
Wholesale Trade	4,700	3.8	4,700	3.5	0.0	0.0
Retail Trade	19,500	15.7	20,900	15.6	6.7	1.0
Finance, Insurance, Real Estate	3,400	2.7	3,800	2.8	10.5	1.6
Services	17,700	14.2	20,800	15.5	14.9	2.3
Government	24,700	19.8	26,500	19.7	6.8	1.0
<b>Total</b>	124,500	100.0%	134,200	100.0%	7.2%	1.1%

(1) Average annual compounded growth rate over 7-year period.

(2) Year 2000 number employed. Latest data available.

Source: California Employment Development Department, 2000.

**TABLE 6.10-5**  
**EMPLOYMENT DISTRIBUTION BY INDUSTRY**  
**IN KINGS AND ADJACENT COUNTIES**  
(Continued)

<b>KERN COUNTY</b>						
INDUSTRY	1997		2004		Percent Change	Percent Growth Rate <sup>(1)</sup>
	No. Emp.	Percent	No. Emp.	Percent		
Farming	49,000	39.4	46,900 <sup>(1)</sup>	34.9	-4.5	-0.6
Mining & Construction	19,200	15.4	21,400	15.9	10.3	1.6
Manufacturing	9,600	7.7	11,000	8.2	12.7	2.0
Transportation, Public Utilities	9,900	8.0	11,400	8.5	13.2	2.0
Wholesale Trade	8,100	6.5	9,100	6.8	11.0	1.7
Retail Trade	34,500	27.7	37,100	27.6	7.0	1.0
Finance, Insurance, Real Estate	6,600	5.3	7,000	5.2	5.7	0.8
Services	43,000	34.5	58,500	43.6	26.5	4.5
Government	48,200	38.7	55,300	41.2	12.8	2.0
<b>Total</b>	<b>228,100</b>	<b>183.2%</b>	<b>257,700</b>	<b>192.0%</b>	<b>11.5%</b>	<b>1.8%</b>

(1) Average annual compounded growth rate over 7-year period.

(2) Year 2000 number employed. Latest data available.

Source: California Employment Development Department, 2000.

Table 6.10-6 shows December 2000 employment data and 1997 median employment data for Kings County and adjacent counties in relation to the entire state. The California Employment Development Department (CEDD) estimates the labor force for Kings County to be approximately 45,000 persons, with 6,450 persons, or 14.3 percent, unemployed. The adjacent counties of Fresno, Tulare and Kern show similar unemployment rates, although the rate for Kern County is somewhat lower. As shown in the table, in all four counties the unemployment rates are 2.5 to 3.5 times the California rate of 4.3 percent. The City of Avenal estimates that unemployment within Avenal is approximately 21 percent (Doughty, 2001a).

**TABLE 6.10-6**  
**DECEMBER 2000 EMPLOYMENT DATA FOR KINGS AND ADJACENT COUNTIES**

AREA	LABOR FORCE	EMPLOYMENT	UNEMPLOY- MENT	UNEMPLOY- MENT RATE	1997 MEDIAN HOUSEHOLD INCOME
Kings County	45,020	38,570	6,450	14.3%	\$30,577
Fresno County	382,200	328,700	53,500	14.0%	\$31,587
Tulare County	170,200	143,300	26,900	15.8%	\$27,622
Kern County	284,600	252,400	32,200	11.3%	\$32,359
California	17,200,000	16,454,000	746,000	4.3%	\$41,203

Source: California Employment Development Department, 2001; U.S. Census Bureau, 2001b.

### 6.10.1.3 Housing

As of January 1, 2000, the total housing stock for Kings County was 37,078 units, with 27,277 single-family homes, 7,406 multiple family dwellings, and 2,335 mobile homes and house trailers. New housing authorizations for the County in 1999 were approximately 500, all single-family residences. The new housing authorizations were valued at \$58.9 million. The vacancy rate as of January 1, 2000, was 6.2 percent, which is above the federal housing standard of 5 percent. Comparable information for Fresno, Tulare and Kern counties is shown in Table 6.10-7. The workers who are expected to relocate are expected to favor population centers in Kings, Fresno and Tulare counties, due to proximity to the Site compared to population centers in Kern County. However, for completeness, housing in all four counties is provided.

**TABLE 6.10-7**  
**HOUSING INFORMATION BY COUNTY<sup>(1)</sup>**

ITEM	KINGS COUNTY	FRESNO COUNTY	TULARE COUNTY	KERN COUNTY
Total Housing Stock	37,078	273,159	121,707	234,487
Single Family Homes	27,277	184,381	92,379	162,465
Multiple Family Dwellings	7,406	75,082	17,824	44,996
Mobile Homes & House Trailers	2,335	13,696	11,504	27,026
New Housing Authorizations	493	3,032	1,653	3,157
Single Family	493	2,646	1,515	2,832
Multiple Family	0	386	138	325
Value	\$58.8 million	\$378.8 million	\$200.2 million	\$361.1 million
Vacancy Rate - 2000	6.2%	6.1%	6.6%	8.5%

<sup>(1)</sup> Data as of January 1, 2000.

Source: California Department of Finance, 2001a.

Cities closest to the Site include Avenal, Stratford, Corcoran, Lemoore, Armona and Hanford. The average cost of a 1,200- to 1,500-square-foot single-family residence in these communities is as follows (National Association of Realtors, 2001):

- City of Avenal               \$68,200
- City of Stratford           \$61,594
- City of Corcoran          \$73,681
- City of Lemoore          \$124,931
- City of Armona            \$69,300
- City of Hanford           \$111,300

If any of the construction work force decides to commute to the Site on a workweek basis and needs temporary housing, there are a number of motels/hotels in Kings County and adjacent counties. While there is only 1 motel/hotel in Avenal and 1 in Coalinga, there are 8 in Lemoore, 22 in Hanford, 52 in Fresno, 21 in Tulare and 24 in Visalia.

For construction workers who bring mobile homes/trailers to the area, there are 36 mobile home/RV parks in Fresno, 11 in Visalia, 4 in Lemoore, 7 in Tulare, 3 in Coalinga and 1 in Kettleman City (Superpages, 2001).

#### 6.10.1.4 Schools

Existing school facilities are relevant to the evaluation of socioeconomic impacts because: (1) the local school systems will receive property tax revenues; and (2) construction workers expected to come from outside the area may bring families that could utilize school resources. The workers who relocate to the area are expected to favor population centers in Kings, Fresno and Tulare counties due to proximity compared to population centers in Kern County. As a result, Kern County is outside the area of reasonably foreseeable potential impact on school systems, except for potential incremental indirect benefits of increased revenues from Project-induced spending that will occur in Kern County.

There are 16 school districts in Kings County, a total of 50 schools and approximately 25,400 students in kindergarten through 12<sup>th</sup> grade. There also are two community colleges, five charter schools and seven private schools with an additional 1,091 students. On average, there is about one full-time teacher for every 24 students. Average class size is about 28 to 30 (Kings County Office of Education, 2001). The Site is located in the Reef Sunset Unified School District that has elementary, middle and high schools. The total number of students enrolled in kindergarten through eighth grade for the Reef Sunset Unified School District was 1,808 in October 2000. The total number of students enrolled in high school (grades 9 to 12) was 619 in October 2000 (Marroquin, 2001). Estimated enrollment for the 2001-2002 school year declined to 2,415 (Jordan, 2001).

Adjacent Tulare and Fresno counties have significantly larger school systems. Information on the school systems of these counties is summarized in Table 6.10-8.

**TABLE 6.10-8**  
**SCHOOLS AND ENROLLMENT IN ADJACENT COUNTIES**  
**SCHOOL YEAR 2000-2001**

COUNTY	NO. DIS- TRICTS	ELEMENTARY		MIDDLE/JR. HIGH		HIGH SCHOOL		OTHER <sup>(1)</sup>		TOTAL	
		No. Schools	No. Students	No. Schools	No. Students	No. Schools	No. Students	No. Schools	No. Students	No. Schools	No. Students
Kings	16	25	14,089	6	5,648	5	5,252	14	375	50	25,364
Fresno	36	167	100,769	37	43,138	28	36,198	36	1,048	268	181,110
Tulare	48	95	48,209	18	19,280	15	17,629	22	546	150	85,664

<sup>(1)</sup> Includes continuation, alternative, community day and other schools.

Source: California Basic Educational Data System, 2001.

#### 6.10.1.5 Utilities

Utilities are relevant to the evaluation of socioeconomic impacts because a development, or influx of people related to a development, can create an increased need for utilities. For the Project, relevant utility conditions are those related to the Site. Residential utilities are not addressed because no material impact is anticipated. Table 6.10-7 shows that housing is available. Few, if any, building starts are expected to occur as a result of the Project.

##### 6.10.1.5.1 Electricity and Gas

Electrical power and natural gas in the Site vicinity are provided by PG&E. The Project will use natural gas from one of the PG&E main lines and provide electrical power into the PG&E transmission line system. (See Section 2.0, Project Description, for further detail on electric and natural gas services.)

##### 6.10.1.5.2 Sewer

There is no sewer service in the Site vicinity. The Project will use an onsite septic tank and leach field for sewage produced by the Project.

##### 6.10.1.5.3 Water

The Site is located adjacent to the City of Avenal water treatment plant, where water is withdrawn from an aqueduct turnout, treated to meet potable water standards, and then piped over the Kettleman Hills to the residential and business districts of the City and to Avenal State Prison.

The current capacity of the water treatment plant is 5.4 million gallons, and the current demand is 3 to 3.5 million gallons per day. The City is planning to install a new water turnout for the water treatment plant.

#### 6.10.1.5.4 Telephone

Pacific Bell provides telephone service to the Site area. There are no known limitations to telephone infrastructure capacity relative to Project demands. However, given the relatively remote location of the Project Site, special arrangements may be necessary for special services lines (e.g., DSL) (Parmentier, 2001).

#### 6.10.1.6 Emergency and Other Services

##### 6.10.1.6.1 Law Enforcement

The Kings County Sheriff's Department (KCSO) is the law enforcement agency for Kings County. The KCSO consists of an Operations Division and a Corrections Division. The Operations Division consists of numerous sections, including Patrol, Investigations, Evidence, Crime Prevention, D.A.R.E. and Photo Lab. There also are specialty assignments, such as Dive Rescue Team, S.W.A.T. Team and an Agricultural Crime Investigations Unit. The KCSO has stations in the City of Avenal and Kettleman City. The Avenal station will be the primary supplier of law enforcement services to the Site, backed up by the Kettleman City station. The Avenal station has 15 full-time personnel and two reserve officers who work essentially full-time. There also are 10 citizens who perform volunteer patrols and report potential crimes to the Avenal station. Kettleman City has five full-time deputies. The Avenal station has 14 patrol cars, and the Kettleman City station has 5. Estimated response time from the Avenal station to the Site is 7 minutes (Bingaman, 2001).

The California Highway Patrol is the primary law enforcement agency for state highways and roads in the unincorporated areas of Kings County. Services include law enforcement, traffic control, accident investigation, and management of hazardous materials spill incidents.

##### 6.10.1.6.2 Fire Protection

Fire protection services for the City of Avenal, and throughout Kings County, are provided by the Kings County Fire Department. The Department consists of eleven fire stations staffed by a combination of 45 career and 105 volunteer firefighters (Dawson, 2001). The Project will



receive fire protection from the City of Avenal and Kettleman City stations. Each of these stations is staffed full-time by two career fire personnel supported by a company of fully trained volunteers. Response time from the City of Avenal station to the Site is approximately 11 minutes. The Kings County Fire Department stated that they could and would provide fire protection for a 640-MW electrical generating plant that Duke Energy previously proposed at the Site in March 2001 (Dawson, 2001). Upon withdrawal of the previous proposal, the Department stated the same protection could likely be provided for the combined-cycle plant described in this AFC (Dawson, 2001).

#### 6.10.1.6.3 Hospitals

The nearest emergency medical facility is the Coalinga Regional Medical Center located in the City of Coalinga. This hospital has 78 staffed beds, with an emergency room and numerous other medical services. Another community hospital is located in the City of Hanford. The nearest hospital with a trauma center is the University Medical Center in Fresno. This hospital has the highest rated trauma center (Class I), with a helicopter and helipad located at the hospital (Coalinga Regional Medical Center, 2001).

#### 6.10.1.7 Fiscal Resources

Kings County and the City of Avenal are the two key agencies with the power to tax that are relevant to the Project. Table 6.10-9 shows the revenues and expenses for Kings County for fiscal years ending June 30, 1999, June 30, 2000 and June 30, 2001.

Table 6.10-10 shows similar information for the City of Avenal. The City has received over \$2 million in funds from the state to make improvements in its water and sewage treatment plants. The improvements are required to provide water and sewage treatment to the Avenal State Prison. For the fiscal year ended June 30, 2000 (FY 2000), these improvements, plus other projects, resulted in total expenditures of \$4,069,261 compared to revenues of \$3,574,719. This excess was financed through a drawdown of fund balances and an infusion of funds from other financing sources. Revenues for FY 2001 were about the same as for the previous year. However, increases in expenditures for street repair and maintenance and debt service resulted in a larger deficit in FY 2001 than in FY 2000. This deficit was funded by a drawdown of fund balances.

**TABLE 6.10-9**  
**KINGS COUNTY REVENUE AND EXPENDITURES**

REVENUE/ EXPENDITURE/ FUND	2000-2001 FINAL BUDGET FOR FISCAL YEAR END 6/30/01	FISCAL YEAR END 6/30/00	FISCAL YEAR END 6/30/99
<b>REVENUES</b>			
Taxes	\$15,129,200	\$15,475,791	\$14,772,821
Licenses and Permits	881,640	898,994	856,641
Fines and Forfeits	324,100	418,899	391,319
Use of Money and Property	1,984,700	2,137,367	1,964,809
Intergovernmental Revenues	85,913,052	86,099,326	73,216,434
Charges for Services	8,457,813	8,143,561	6,780,959
Miscellaneous Revenue	2,105,211	1,263,000	1,003,479
<b>Total Revenue</b>	<b>\$114,795,716</b>	<b>\$114,436,938</b>	<b>\$98,986,462</b>
<b>EXPENDITURES</b>			
General Government	\$9,780,242	\$10,187,327	\$8,600,468
Public Safety	37,803,137	35,953,366	34,599,661
Public Transportation	5,872,927	8,339,480	4,907,048
Health	14,689,976	15,774,144	11,449,710
Welfare	42,084,039	38,381,855	37,900,977
Education	1,351,248	1,314,834	1,159,626
Recreation	921,805	832,959	700,102
Capital Outlay	24,536,291	5,903,971	1,355,105
Debt Service	0	0	0
<b>Total Expenditures</b>	<b>\$137,039,665</b>	<b>\$116,687,936</b>	<b>\$100,672,697</b>
Revenue Over (Under) Expenditures	(22,243,949)	(2,250,998)	(1,686,235)
Other Financing Sources	19,908,000	3,696,492	0
Other Changes in Fund Balance	798,000	2,163,383	80,310
Fund Balance Available-July 1	10,047,221	6,438,344	8,044,269
Fund Balance Available-June 30	8,509,272	10,047,221	6,438,344

Source: Kings County Auditor's Office, 2001.

**TABLE 6.10-10**  
**CITY OF AVENAL REVENUE AND EXPENDITURES**

REVENUE/EXPENDITURE/FUND	YEAR END 6/30/01 <sup>(1)</sup>	YEAR END 6/30/00
<b>REVENUE</b>		
Taxes	\$944,797	\$944,695
Licenses and Permits	53,070	42,263
Charges for Services	16,727	84,356
Federal Revenue	271,761	265,872
Intergovernmental Revenues	1,095,341	1,121,453
Fines and Penalties	55,786	32,121
Investment Income	809,375	806,455
Rents	8,492	2,806
Loan Repayments	64,648	91,806
Streets (Public Works)	107,756	102,982
Other Revenue	168,205	79,921
<b>Total Revenue</b>	<b>\$3,595,958</b>	<b>\$3,574,719</b>
<b>EXPENDITURES</b>		
General Government	\$69,340	\$65,224
Management and Support	186,816	217,188
Building Regulation	95,855	65,154
Planning	34,243	11,012
Community Development	495,250	334,393
Public Safety	708,870	860,680
Parks & Recreation	193,496	168,962
Streets (Public Works)	895,185	220,815
Capital Outlay	798,370	773,911
Debt Service	1,675,526	1,351,922
<b>Total Expenditures</b>	<b>\$5,152,952</b>	<b>\$4,069,261</b>
Revenue Over (Under) Expenditures	(\$1,556,994)	(\$494,542)
Other Financing Sources	--	\$157,500
Change in Fund Balances	\$1,556,994	(\$337,042)

Source: City of Avenal, 2001a; 2001b.

(1) Preliminary numbers. Unaudited.

#### 6.10.2 IMPACTS

Significance criteria for socioeconomics were determined based on California Environmental Quality Act (CEQA) Guidelines, Appendix G, Environmental Checklist Form (approved December 1, 1999), and on performance standards or thresholds adopted by responsible agencies.

An impact may be considered significant if the Project results in:

- Substantial displacement of homes, businesses, or population.
- A demand for community resources (including housing, schools, utilities and public services) that could not be easily met by the available resources or if the provision of the service results in inadequate services for other existing users.
- Substantial population growth.

- Substantial adverse physical impacts from establishment of public services or facilities.
- Exceedance of wastewater treatment capacity requirement for new or expanded wastewater treatment facilities.

In accordance with the CEQA Guidelines, economic and social changes from a project are not treated as significant effects on the environment. Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project. If the physical change causes adverse economic or social effects on people, those adverse effects may be used as a factor in determining whether the physical change is significant (California Code of Regulations, Title 14, Section 15064[e]).

Socioeconomic impacts are determined by comparing Project demands and benefits during construction and operation with the socioeconomic resources in the area where the Project is located. A proposed power plant could potentially impact employment, population, housing, public services and utilities, and schools. Impacts could be felt locally, in the City of Avenal and Kings County, and/or regionally, in adjacent counties. The Project will require a construction work force that is available regionally, with most workers expected to commute to the Site from existing residences. The operation work force will provide permanent, high-paying jobs for the operational life of the Project. Duke Avenal is committed to hiring from the local labor pool to the extent possible. Considering these factors, plus revenues to the public that will occur due to the Project, and additional details described in following sections, the Project's adverse impacts on the socioeconomic environment will be less than significant. The overall impact of the Project to socioeconomic resources will be beneficial.

Under CEQA, the Commission should take into account the property tax contribution when evaluating socioeconomic impacts of this Project. The legislature supported this concept in Senate Bill (SB) 28, approved May 22, 2001. Although SB28 applies to the notice of intent process, the Commission should apply these same standards and determine if increased property taxes from the Project are sufficient to support needed local improvements and services.<sup>(1)</sup>

Based on the analyses provided in this section, the Project will require minimal local improvements and services during Project construction and operation. During construction, most workers are expected to commute to the Site on a daily basis and so will have little effect on local resources.

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<sup>(1)</sup> Although the legislature added this requirement to the section of the Warren-Alquist Act addressing the Notice of Intent requirements, it is expected that the legislature intended this provision to apply to AFCs and may be corrected in cleanup legislation.

During operations, the Project will provide for 30 permanent employment positions, an operations payroll of \$2.1 million, and will contribute an estimated \$3.25 million in property taxes annually. The increased property tax revenues from the Project will be sufficient to support any local improvements and public services required to serve the Project.

#### 6.10.2.1 Construction Impacts

##### 6.10.2.1.1 Construction Work Force

An average of approximately 240 construction workers will be onsite during the 20-month construction schedule, with an estimated peak of approximately 425 workers (see Figure 2.3-13 and Table 2.3-6).

The primary trades required during construction include boilermakers, carpenters, electricians, ironworkers, laborers, millwrights, operators and pipefitters. Table 2.3-6 shows construction personnel requirements by trade over the construction period. Total personnel requirements for Project construction will be an estimated 4,786 person-months.

##### 6.10.2.1.2 Population

The availability in the surrounding area of the types of construction craft workers required for the Project is shown in Table 6.10-11. Approximately 80 percent of the construction work force of 240 average and 425 peak workers is expected to be drawn from the existing regional labor pool, providing an average of approximately 190 jobs for the existing local labor force for the construction period, and a peak of approximately 340 jobs for the local labor force during the period of maximum activity. This range primarily includes residents from the closest large population centers in Kings, Fresno and Tulare counties, including Hanford, Corcoran, Visalia, Tulare and Fresno, that provide a large labor pool compared to resources needed for the Project. Fewer workers are expected to come from Kern County because the closest large population center in Kern County (Bakersfield) is substantially further from the Site.

**TABLE 6.10-11**  
**ESTIMATED NUMBER OF CONSTRUCTION**  
**CRAFT WORKERS IN YEAR 2002**

WORKER CRAFT	COUNTY				
	Kings	Fresno	Tulare	Kern	Total
Insulation Workers	-- <sup>(1)</sup>	120	80	230	430
Boilermakers <sup>(2)</sup>	--	--	--	--	--
Bricklayers/Masons	60	1,130	210	643	2,043
Carpenters	100	1,530	390	514	2,534
Electricians	80	780	270	604	1,734
Ironworkers		80	60	104	244
Laborers	2,850	17,000	8,530	12,924	41,304
Millwrights	--	--	--	251	251
Operating Engineers <sup>(3)</sup>	430	1,940	630	2,389	5,389
Painters	50	610	170	249	1,079
Pipefitters	40	710	310	691	1,751
Sheetmetal Workers	40	263	90	120	513
Surveyors	--	140	--	137	277
Teamsters	540	6,580	2,220	6,137	15,477
Mechanics	40	460	140	594	1,234
Welders	50	530	260	824	1,664
Flagmen <sup>(4)</sup>					
Foremen <sup>(5)</sup>					
Management/Office <sup>(5)</sup>					
<b>Totals</b>	<b>4,280</b>	<b>31,610</b>	<b>13,360</b>	<b>26,161</b>	<b>75,925</b>

(1) -- = Data not available

(2) None listed in the four-county area.

(3) Includes equipment operators

(4) Included in laborers

(5) Personnel supplied by contractor or owner

Source: California Employment Development Department, 2000.

The remaining 20 percent of the construction work force (approximately 50 average, 85 peak) is expected to establish temporary residence (weekly, monthly) in local hotels and motels, and rental properties. It is expected that the population centers in Kings, Fresno and Tulare counties will be favored due to proximity to the Site. The 50 average and 85 peak construction workers that relocate to these counties will represent a small incremental increase in demand for facilities and are not expected to result in substantial physical change.

Large population centers in Kern County (e.g., Bakersfield) are located considerably further from the Site and, therefore, Kern County is not expected to be materially impacted by workers moving to that area.

#### 6.10.2.1.3 Employment and Economy

Construction craft workers located in Kings, Fresno, Tulare and Kern counties are shown in Table 6.10-11. Together, the four counties have over 75,925 craft workers of the types that will be used to construct the Project. In 2000, the unemployment rate in Kings County was 14.3 percent. In Fresno, Tulare and Kern counties, the unemployment rate was 14, 15.8 and 11.3 percent, respectively (Table 6.10-6). These unemployment rates are two to three times the overall unemployment rate for the state of California. Considering the relatively high levels of unemployment in the Project region, the estimated average 190 jobs for the existing local labor force for the construction period, and the approximately 340 peak construction jobs for the local labor force will be a benefit for the region. The large number of skilled workers available compared to Project needs, and the relatively high regional unemployment levels, provide a strong indication that most required jobs can be filled from the existing work force. Many of the skilled workers are regional construction workers who typically move from job site to job site. The Project also will create indirect jobs in other service areas, thereby providing further employment.

The anticipated payroll for employees and the cost of materials and supplies for construction will be a benefit for the area. The estimated cost of the project is \$325 million. Of this amount, approximately \$1.5 million will be spent on local purchases of materials and supplies for Project construction. Based on a sales tax rate of 7 percent, sales tax will be an estimated \$105,000.

The estimated Project construction payroll is approximately \$69.5 million. Based on 80 percent of the construction work force commuting from Kings, Fresno, Tulare or Kern counties, an estimated \$55.6 million of the \$69.5 million construction payroll will stay in the area. Of the 20 percent of construction workers who are expected to temporarily reside in the area, a portion of their pay will be expended locally.

The additional dollars spent in the community will generate a temporary impact by creating the potential for other employment opportunities for local workers in other areas of service (i.e., transportation, wholesale and retail trades, amusement and other business services), both in the City of Avenal and the larger four-county area. In addition to the estimated payroll, the Project also will create additional employment opportunities and, therefore, personal income in the region

through the Project's local expenditures on construction materials and services. Based on socioeconomic modeling conducted for the Project, the personal income multiplier for Project construction is estimated to be 1.99 (Goldman, 2001). This means that, for each one dollar of direct income generated, 0.99 dollar of indirect and induced income is generated. The total value added multiplier for Project construction is 2.38. This means that, for each two dollars of value added directly by the Project, another 0.38 dollar is added as an indirect and induced value (Value added includes employee compensation, proprietary income, other property-type income and indirect business taxes) (Lindall and Olsen, n.d.). As a result, estimated Project construction payroll of \$69.5 million will result in an additional \$68.8 million of income in the region. The addition of the estimated \$325-million Project will result in approximately \$61.7 million of value added to the regional economy.

#### 6.10.2.1.4 Housing

Most of the construction work force is expected to commute to the Site on a daily basis and, therefore, will already occupy housing in the region. For workers who temporarily relocate, there are adequate vacancies in Kings, Fresno and Tulare counties. The Kings County housing vacancy rate in 2000 was 6.2 percent. This is greater than the federal housing standard of 5.0 percent, which is the rate at which housing is considered to be in short supply. The housing vacancy rates for Fresno and Tulare counties in 2000 were 6.1 and 6.6 percent respectively, indicating a relatively good supply of available housing. In addition, there are more than 120 hotels and motels within commuting distance to accommodate the relatively low number of workers who may utilize these accommodations. Even if all of the estimated 85 workers that may come from outside of the area during the peak construction period were to use these accommodations, the average number of rooms required would be less than one per hotel/motel. Although there may be peak times throughout the year that hotel and motel space is less available (such as graduations, special community events, business conferences), the temporarily relocating work force should be able to plan ahead to allow for these peak times.

#### 6.10.2.1.5 Schools

The majority of construction workers are anticipated to be provided from within commuting distance and are not expected to relocate. The number of construction workers that will move to the area and remain working onsite for an extended period of time (e.g., many months) will be small. Further, due to the transient nature of the work, the majority of construction workers that temporarily relocate for construction projects typically do not bring families with school-age



children. A few workers might potentially bring school-age children to the area, but the number will be low, and any impact will be spread over Kings, Fresno and Tulare counties, so the impact will be less than significant.

#### 6.10.2.1.6 Utilities

The number of construction workers temporarily residing in the area will be small, and accommodations for these workers are available. Few or no new building starts or other increased utility demands are expected from workers moving to the area.

Project construction will utilize existing electrical supplies in the area. Electrical power is available from existing transmission lines that run along the eastern boundary of the Site. Portable toilets will be used, and sanitary wastes will be hauled from the Site for appropriate disposal. Water for construction will be provided by existing groundwater wells. Potable water will be supplied from the adjacent City of Avenal water treatment plant. Telephone service will be provided to the Site from existing lines located along Avenal Cutoff Road. No significant physical changes to the environment are expected to occur as a result of these service needs.

#### 6.10.2.1.7 Emergency and Other Services

During construction, Site security will be provided by the Project owner. Other law enforcement services will be provided by the Kings County Sheriff's Department, using existing facilities and personnel located in Avenal and Kettleman City. Fire protection will be provided by the Kings County Fire Department using existing facilities and personnel. Adequate medical facilities are available in the Coalinga Regional Medical Center located in the City of Coalinga, with 78 staffed beds, emergency room and numerous other medical services. Another community hospital is available in the City of Hanford. Therefore, Project construction is not expected to result in significant physical changes to the environment related to these services.

#### 6.10.2.1.8 Fiscal Resources

The effect on fiscal resources during construction will be the economic benefit of state sales taxes realized on equipment and materials purchased in the city and county. The sales tax rate in Kings County and the City of Avenal is 7 percent. Sales tax on equipment and materials purchased in California is collected by the seller of the equipment or materials and paid to the

state. One percent of the 7 percent sales tax rate is paid back to the city or county where the tax is collected. An additional 0.25 percent is paid back to the county for local transportation.

For Project construction, the purchase of materials and supplies is estimated to result in \$3 million in sales taxes within the state of California. On a local basis, estimated expenditures of \$1.5 million for materials and equipment is expected to generate sales tax revenue of \$105,000. A portion of this will be returned to the local area.

#### 6.10.2.2 Operations and Maintenance-Related Impacts

##### 6.10.2.2.1 Operations Work Force

The Project is expected to employ approximately 30 full-time regular employees. Table 6.10-12 shows the anticipated job classifications.

**TABLE 6.10-12  
PLANT OPERATION WORK FORCE**

DEPARTMENT	PERSONNEL	SHIFT	WORK DAYS
Operations	16 Operators	Rotating 12-hour shifts, 4 operators per shift	7 days a week
Maintenance	10 Maintenance Technicians (6 mechanical, 2 electrical, 2 instrumentation)	Standard 8-hour days	5 days a week (Maintenance Technicians will also work unscheduled days and hours as required)
Administration	4 Administrators (1 Operations Supervisor, 1 Maintenance Supervisor, 1 Plant Manager, 1 Plant Administrator)	Standard 8-hour days	5 days a week with additional coverage as required

##### 6.10.2.2.2 Population

Due to the proximity of the Project to the various population centers in Kings County and adjacent counties, it is anticipated that most of the permanent work force will live in and commute from these counties. Duke Energy estimates that approximately two-thirds of the operation employees will be hired from the existing local labor force. The potential impact of Project operations on area population, therefore, is estimated to be an influx of approximately 10 workers, some of whom may bring families. This small influx of population is expected to be spread over population centers in Kings, Fresno and Tulare Counties and represents a negligible influx.

#### 6.10.2.2.3 Employment and Economy

The Project is expected to employ approximately 30 people in full-time, onsite positions. The annual operation payroll is expected to be \$2.1 million. The 30 full-time positions will be beneficial, but will not substantially alter local employment conditions because the number of jobs provided is small compared to the available work force and high regional unemployment levels (Table 6.10-6). The additional jobs and resulting spending will help generate other employment opportunities and spending in the Kings County area. For Project operation, the personal income multiplier is 1.76, and the value added multiplier is 1.29 (Goldman, 2001). Based on these multipliers (defined in Section 6.10.2.1.3), the annual Project operation personnel income of \$2.1 million will result in an additional \$1.5 million to the regional economy. Based on an estimated \$325 million of value added by the Project, approximately \$94 million of value will be added to the regional economy.

For Project operations, local expenditures for materials and supplies are estimated to be approximately \$2 million per year. This would result in an estimated \$140,000 in sales taxes, with redistribution to the local area. Primary recipients of the sales tax redistributions are expected to be the City of Avenal, as well as the cities of Hanford, Lemoore and Corcoran.

#### 6.10.2.2.4 Housing

It is anticipated that an additional approximately 10 permanent housing units will be required for the operations work force. Existing housing stock for Kings, Fresno and Tulare counties in 1999 was 37,078, 273,159 and 121,707, respectively, for a total of 431,944. New authorized housing for the three counties for 1999 was 493, 3,032 and 1,653, for a total of 5,178. The requirement for approximately 10 housing units will be less than significant.

#### 6.10.2.2.5 Schools

##### Property Taxes

Kings County will receive an estimated \$3.25 million per year in property taxes from the project. The County and City of Avenal educational systems will benefit from revenues received from these property taxes. The Reef-Sunset Unified School District will receive an additional \$861,400 per year in revenue based on the existing distribution in property taxes shown in Table 6.10-14.

##### School Impact Fees

School districts within a county will assess a one-time school impact fee for development taking place in their district. The Project is within the Reef Sunset Unified School District, which will assess an impact fee for the Project. The fee is \$0.33 per square foot of commercial building

space added (Brown, 2001). The control and administration building and warehouse will add approximately 9,000 square feet of commercial building space. The school impact fee will be assessed against this area, resulting in a one-time payment of \$2,970 to the Reef-Sunset Unified School District

### Enrollment

An additional approximately 10 permanent workers is expected to add 10 to 20 children to the existing school population in Kings, Fresno and/or Tulare counties, depending on where the workers choose to live. The school populations for the 2000-2001 school year for Kings, Fresno and Tulare counties are 24,989, 180,105 and 85,118, respectively. The addition of 10 to 20 students to these student populations will be less than significant. In fact, all of the additional children could be accommodated in the Reef-Sunset Unified School District in Avenal (Brown, 2001). This district had a declining enrollment during the 2001-2002 school year (Jordan, 2001). Projected enrollments for school years 2001-2002 through 2004-2005 are shown in Table 6.10-13.

**TABLE 6.10-13**  
**PROJECTED SCHOOL ENROLLMENTS**

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
Kings County <sup>(1)</sup>					
Elementary School	14,089	14,512	14,947	15,395	15,857
Middle School	5,648	5,818	5,993	6,173	6,358
High School	5,252	5,409	5,571	5,738	5,910
Reef-Sunset Unified School District <sup>(2)</sup>	2,426	2,415	2,415	2,415	2,415
<b>TOTAL</b>	<b>24,989</b>	<b>25,739</b>	<b>26,511</b>	<b>27,306</b>	<b>28,125</b>
Fresno County <sup>(3)</sup>					
Elementary School	100,769	101,777	102,795	103,823	104,861
Middle School	43,138	45,569	44,005	44,445	44,889
High School	36,198	36,560	36,926	37,295	37,668
<b>TOTAL</b>	<b>180,105</b>	<b>181,906</b>	<b>183,726</b>	<b>185,563</b>	<b>187,418</b>
Tulare County <sup>(4)</sup>					
Elementary School	48,209	49,505	50,772	52,098	53,425
Middle School	19,280	19,855	20,362	20,894	21,427
High School	17,629	18,105	18,568	19,053	19,539
<b>TOTAL</b>	<b>85,118</b>	<b>87,465</b>	<b>89,702</b>	<b>92,045</b>	<b>94,391</b>

Elementary School= Grades K-6

Middle School = Grades 7-9

High School = Grades 10-12

(1) Enrollment projected to increase 3 percent per year (Marroquin, 2001).

(2) Included in Kings County projections. Projected to remain the same (Jordan, 2001).

(3) Enrollment projected to increase 1 percent per year (Berg, 2001).

(4) Based on overall population projections for 2000 - 2010.

#### 6.10.2.2.6 Utilities

The Project will provide its own electricity for plant use and so will not burden existing sources of electricity. The facility will utilize a septic tank to manage domestic waste. There will be no discharge to existing sewer systems. The Project requirement for telephone service is expected to be small and will not impact the existing telephone system. Natural gas will be provided by PG&E from a large gas transmission line and will not impact the use of natural gas by local businesses and residences. Potable water demand will be low (2.5 gpm average) and will be supplied from the existing adjacent City of Avenal water treatment facility. Considering these factors, Project operation will have a less than significant impact on utilities.

#### 6.10.2.2.7 Emergency and Other Services

During operation, Site security will be provided by the Project operators. Other law enforcement services will be provided by the Kings County Sheriff's Department, using existing facilities and personnel located in the cities of Avenal and Kettleman City. Fire protection will be provided by the Kings County Fire Department, using existing facilities and personnel. Adequate medical facilities are available in the Coalinga Regional Medical Center located in the City of Coalinga, with 78 staffed beds, emergency room and numerous other medical services. Another community hospital is available in the City of Hanford. Therefore, Project operation impacts on existing public services or facilities will be less than significant. The Project will contribute to many of these services directly through property tax contribution. For example, an estimated \$413,000 per year is estimated to go to the fire department, with \$961,000 per year to the County General Fund.

#### 6.10.2.2.8 Fiscal Resources

Annual property tax will be approximately \$3.25 million. These tax revenues will be collected by Kings County; some will be distributed to the City of Avenal. Based on the FY 2000 distribution of property taxes in Kings County, the distribution will be as shown in Table 6.10-14.

Receipt of an estimated \$653,000 per year in property taxes by the City of Avenal will have a beneficial impact on the City's total revenue of approximately \$3.6 million (FY 2000), increasing it by approximately 18 percent. The impact on Kings County revenues of approximately \$114.8 million (FY 2001) also is beneficial. The additional \$961,000 in property taxes to the County General Fund will increase County revenues by approximately 8 percent. Contributions to other County funds will further increase total revenues.

**TABLE 6.10-14****ALLOCATION OF DUKE AVENAL PROPERTY TAXES IN  
RELATION TO CITY OF AVENAL TAX BASE**

COUNTY FUND/SERVICE	ALLOCATION (percent)	KINGS COUNTY PROPERTY TAXES YEAR ENDED 6/30/00 <sup>(1)</sup>	ESTIMATED PROPERTY TAXES WITH PROJECT <sup>(1)</sup>	PROJECT CONTRIBUTION TO PROPERTY TAXES <sup>(1)</sup>
City of Avenal	20.0928	\$ 190,112	\$ 843,128	\$ 653,016
County General Fund	29.5796	279,874	1,241,211	961,337
County Library	1.9305	18,266	81,007	62,741
County Fire Protection	12.7090	120,249	533,291	413,042
Avenal Hospital	2.3726	22,449	99,558	77,109
Lemoore Cemetery	0.7317	6,923	30,703	23,780
Reef Sunset School	26.5049	250,782	1,112,191	861,409
Office of Education	2.2774	21,548	95,563	74,015
West Hills Community College	3.8015	35,969	159,517	123,548
<b>TOTAL TO COUNTY</b>	<b>1.000%</b>	<b>946,172</b>	<b>4,196,171</b>	<b>3,250,000</b>
<b>Total Assessed Valuation</b>		<b>\$94,617,162</b>	<b>\$419,617,162</b>	<b>\$325,000,000</b>

<sup>(1)</sup> Rounded to nearest dollar  
Source: Doughty, 2001.

Pacific Gas & Electric Company pays the City of Avenal a franchise fee for natural gas delivered for use within the City. The franchise fee is based on the current price of fuel, anticipated annual fuel use and the franchise fee percentage. Natural gas used by the Project will generate franchise fee revenues for the suppliers.

For Project operations, local expenditures for materials and supplies are estimated to be approximately \$2 million per year. This would result in an estimated \$140,000 per year in sales taxes, with redistribution to the local area. Primary recipients are expected to be the City of Avenal, as well as the cities of Hanford, Lemoore and Corcoran.

#### 6.10.2.2.9 Statewide Electricity Supply

The Project will be a substantial contributor to meeting the state's energy needs. By supporting local and San Joaquin Valley loads, the Project will improve electric supply reliability in this region. Furthermore, the Project generating capacity will provide additional reactive power capability that will serve to improve area transmission system voltage. The addition of the 600 MW combined-cycle generation module results in more firm generation available for direct local service to the San Joaquin Valley area loads. As local area loads grow, service can be efficiently provided from the Project.

#### 6.10.2.2.10 Environmental Justice Screening Analysis

For power plant siting cases, the Commission follows the federal guidelines screening process for environmental justice (U.S. Environmental Protection Agency, 1998). This two-step process assesses:

- Whether the potentially affected community includes minority and/or low-income populations.
- Whether the environmental impacts are likely to fall disproportionately on minority and/or low-income members of the community.

According to the guidelines, a minority population exists if the minority percentage of the affected area is 50 percent or more of the general population. As shown in Table 6.10-4, the percent of non-white persons in Kings County is 46.3 percent, less than the 50 percent standard. The minority population of nearby Fresno County is 45.7 percent and for Tulare County is 49.2 percent. For the more distant Kern County, the minority population is 38.4 percent. All are less than the 50 percent standard. Table 6.10-15 shows that the two communities in Kings County nearest the Project site, Avenal and Kettleman City, have primarily Hispanic populations of 65.9 and 92.7 percent, respectively.

**TABLE 6.10-15**

**POPULATION, RACE/ETHNICITY AND POVERTY LEVEL  
AVENAL AND KETTLEMAN CITY**

SUBJECT	CITY OF AVENAL		KETTLEMAN CITY	
	Number	Percent	Number	Percent
<b>RACE/ETHNICITY</b>				
Total Population	14,674	100.0%	1,499	100.0%
White	2,923	19.9	81	5.4
Hispanic/Latino <sup>(1)</sup>	9,667	65.9	1390	92.7
Black/African American	1,808	12.3	6	0.4
Asian	54	0.4	0	0.0
American Native	79	0.5	12	0.8
Hawaiian or Pacific Islander	2	0.0	0	0.0
Other	141	1.0	10	0.7
<b>POVERTY LEVEL<sup>(2)</sup></b>				
Total Number of Persons <sup>(3)</sup>	5,158	100.0%	1,496	100.0%
Persons Below Poverty Level	1,475	22.5	553	23.5

Source: U.S. Census Bureau, 2001a.

(1) Hispanics may be of any race, so all are included in applicable race categories.

(2) Data from 1990 Census (U.S. Census Bureau, 2001d). 2000 data not available.

(3) Persons for whom poverty status is determined.

To assess low-income populations, the U.S. Census determination of poverty level was used, assuming the same 50 percent criterion as used to determine minority population. According to the 2000 U.S. Census, the poverty threshold for a U.S. family of four (two children) is \$17,463 (U.S. Census Bureau, 2001e). As shown in Tables 6.10-4 and 6.10-15, the number of persons living below the poverty level in Kings and Fresno Counties, and within the nearby communities of Avenal and Kettleman City, is less than 50 percent. As a result, there appear to be no environmental justice issues based on low-income population in the study area.

Population within 6 miles of the Site is minimal, consisting of a few scattered farmhouses. The nearest farmhouses are located more than 1 mile from the Site. The residential area of Avenal is located approximately 6 miles southwest of the Site and is separated from the Site by the Kettleman Hills. The next closest community, Kettleman City, is located approximately 9 miles southeast of the Site. The Project will not be visible from either of these communities, nor will there be any other adverse environmental impacts on these areas.

There will be no substantial adverse impact on nearby communities as a result of the Project. The Project will provide direct and indirect jobs, as well as other economic benefits for area residents. There are no potential environmental justice issues relative to minority or low-income populations.

#### 6.10.2.3 Cumulative Impacts

Other activities in the region with the potential for cumulative impacts are identified in Section 6.1.4. Because of the geographic separation between the Site and the location of other activities as described in Section 6.1.4, the primary potential for cumulative socioeconomic impacts (other than beneficial economic growth) is that related to the construction work forces. As shown in Figure 6.1-3, the expected construction schedule for the Hanford Hospital will not overlap with Project construction, so there is no potential for cumulative impacts. Other activities with the potential for cumulative socioeconomic impacts include the City of Avenal water turnout relocation, the Coalinga Mental Health Facility, and the City of Mendota Prison. The Project will not have significant cumulative impacts with these other activities for reasons described in the following paragraphs.

The City of Avenal water turnout relocation is expected to begin in early 2003, and have an 8- to 12-month construction period. This is the same time period as the maximum work force for Project construction. However, the maximum daily construction work force for this project is 6 to



10 workers, and some of these may be existing city employees. As a result, the potential cumulative impact relative to worker availability and housing would be minimal.

The Coalinga Mental Health Facility is expected to begin construction in Fall 2001 and be completed in 2004. Based on this schedule, the earthmoving and major construction work would be completed prior to peak Project demands, when the finish work would be ongoing at the Coalinga facility. As a result, the cumulative impact related to the demand for construction personnel and temporary housing will be less than significant.

The planned City of Mendota Prison, to be located approximately 50 miles north of the Project, has begun site selection; construction could begin within 2 years (late 2003). This schedule would result in ground breaking at the prison occurring just after the peak of Project construction. The peak of construction activity at the prison would not be expected until after Project construction is complete. Based on the needs for differing construction crafts for the two types of projects, and because the peak of activities at these two projects would not closely coincide, the cumulative impact relative to the demand for construction personnel is not expected to be significant. Further, based on the location of the prison in northwestern Fresno County, its work force is expected to be drawn from the City of Fresno and areas to the north. Also, because the prison is 50 miles north of the Project, there should be no significant cumulative impact on temporary housing for out-of-area construction workers. Workers at the prison will likely use housing in the cities of Fresno, Madera and Merced, while Project workers will likely use housing in Coalinga, Hanford, Lemoore and Visalia. Therefore, together with the Project, the cumulative impact on the area's construction work force or on housing would be less than significant.

Based on the above analysis, there is the potential for cumulative impacts, primarily related to the demand for construction workers to accommodate the needs of the above projects, and for housing to accommodate workers who come from out of the area. However, based on the schedules for the various projects and the need for varied types of construction workers, this cumulative impact is expected to be less than significant.

Once the facilities become operational, the Project, the Coalinga Mental Health Facility and the Hanford Hospital in the Project vicinity will be sources of long-term employment, with associated socioeconomic impacts. The anticipated 30 full-time positions provided by the Project will contribute to the regional cumulative effect of other new employment opportunities in the area, especially those provided by the Coalinga Mental Health Facility and Hanford Hospital.

#### 6.10.2.4 Project Design Features

The following design features of the Project either will minimize socioeconomic impacts or will provide socioeconomic benefits:

- The Site is located away from developed areas.
- Duke Avenal is committed to utilizing the existing local labor force and purchasing goods and services locally to the extent practical.
- The Project will provide economic benefits to the regional communities, including jobs, income, taxes, franchise fees and indirect revenue.

#### 6.10.3 MITIGATION MEASURES

Based on the above analysis of impacts and the design features that have been incorporated into the Project, no mitigation measures are required.

#### 6.10.4 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

There are no significant unavoidable adverse impacts to socioeconomic resources from construction or operation of the Project.

#### 6.10.5 LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS)

A summary of laws, ordinances, regulations and standards (LORS) applicable to the Project is provided in Table 6.10-16. Specific permits relative to socioeconomic resources are not required for the Project. There are no permits or approvals required for the Project related to socioeconomics that are outside the jurisdiction of the Commission. Table 6.10-17 provides a listing of agency contacts for socioeconomics.

**TABLE 6.10-16****SOCIOECONOMIC LORS AND COMPLIANCE**

JURISDICTION	LORS/AUTHORITY	ADMINISTERING AGENCY <sup>(1)</sup>	REQUIREMENTS/ COMPLIANCE	APPROACH TO COMPLIANCE	AFC SECTION
Federal	Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations.	California Energy Commission	Analysis to determine if there are disparate impacts to minority-based or low-income-based populations.	Project will have no disparate impacts to minority-based or low-income-based populations.	6.10.2.2.10 Pages 6.10-28
State	PRC §25523(a); 20 CCR §1752, 1752.5, 2300-2309 and Chapter 2, Subchapter 5, Appendix B, Part (i); 14 CCR §15131.	California Energy Commission	Requirement to include economic or social effects analysis in AFC.	Submittal of AFC to the California Energy Commission.	6.10 Pages 6.10-1 through 6.10-34
	Cal. Govt. Code §53080, 65955-65997.	Reef-Sunset Unified School District	Provides for assessment of school impact fees on industrial construction.	Reef Sunset Unified School District will charge a one-time fee for Project to mitigate potential impact on schools.	6.10.2.2.5 Page 6.10-24
Local	None applicable.	None applicable.	None applicable.	None applicable.	None applicable.
Industry	None applicable.	None applicable	None applicable.	Not Applicable.	None Applicable

31161/Avenal AFC/Tbls&amp;Figs (9/18/01/ks)

- (1) Pursuant to CCR Title 20, Appendix B(h)(1)(B): Each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.

**TABLE 6.10-17**

**ADMINISTRATIVE AGENCY CONTACTS  
AND PERMITTING/APPROVAL AUTHORITIES  
SOCIOECONOMICS**

LOCAL AUTHORITY OVERSIGHT/ ENFORCEMENT AND AGENCY CONTACTS	PERMITTING/APPROVAL AUTHORITY
California State Board of Equalization Policy Planning & Standards Division MIC 64 P.O. Box 94287 Sacramento, California 94279-0064 (916) 445-2347 P. Bowens, Associate Auditor/Appraiser	None
California State Board of Equalization Valuation Division MIC 61 P.O. Box 94287 Sacramento, California 94279-0061 (916) 322-228 O. Lee, Principal Property Appraiser	None
Kings County Fire Department 280 North Campus Drive Hanford, California 93230 (559) 582-3211 D. Dawson, Chief	None
Kings County Sheriff's Department - Avenal Station 501 East Kings Avenal, California 93202 (559) 386-5361 M. Bingaman, Commander, Avenal Station	None
Kings County Office of Education 1144 Lacey Boulevard Hanford, California 93230 (559) 584-1441 ext. 2914 C. Marroquin, Administrative Assistant to County Superintendent	None
Kings County Auditor's Office 1400 West Lacey Boulevard Hanford, California 93230 (559) 582-3211 ext. 2460 H. Nikoghosian, Auditor	None
Kings County Appraiser's Office 1400 West Lacey Boulevard Hanford, California 93230 (559) 582-3211 ext. 2497 M. Loya, Chief Appraiser	None
City of Avenal 919 Skyline Boulevard Avenal, California 93204 (559) 386-5766 M. Whitten, City Manager	None
Reef-Sunset Unified School District 205 North Park Avenue Avenal, California 93204 (449) 386-9083 ext. 5 D. Brown, Administrative Assistant to School Superintendent	None
Coalinga Regional Medical Center 1191 Phelps Avenue Coalinga, California 93210 (559) 935-6400	None
University Medical Center - Fresno Trauma Center 445 South Cedar Fresno, California 93702 (559) 459-4000	None

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